Summaries of nine research projects completed and 26 research projects proposed or in progress, titles of papers produced in coordinated research and teaching programs, and a list of 13 international, national, or regional, seminars, conferences, or expert working group meetings contributing to human resources development in Asia and the Far East are presented. Completed research projects include (1) Survey of Documentary Material on Human Resources Development with Special Reference to Asia and the Far East, (2) National Planning of Vocational Training, (3) Impact of Industrialization on Employment in United Nations Economic Commission for Asia and the Far East (ECAFE) Countries, (4) Agricultural Manpower Planning as an Integral Part of National Development, and (5) Training in Manpower Statistics. Projects proposed or in progress include (1) Human Resources Development—Principles and Problems, (2) Basic Statistics Relating to Human Resources Development in Asia and the Far East, (3) Mobilization of Human Resources for Economic Development in ECAFE Countries, and (4) The Impact of Agrarian Reforms on Rural Employment. (WB)
PROGRAM OF RESEARCH

IN THE FIELD OF HUMAN RESOURCES DEVELOPMENT

WITH SPECIAL REFERENCE TO ASIA AND THE FAR EAST

Annotated List of Research Projects
Completed and Proposed

M. M. MEHTA
ILO Regional Manpower Planning
and Employment Adviser

UNITED NATIONS
ASIAN INSTITUTE FOR ECONOMIC DEVELOPMENT AND PLANNING,
BANGKOK (THAILAND),
1966
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   - Nature of Planning
   - Vocational Training and Economic Development
   - Cost Aspects of Vocational Training
   - Sources of Revenue for Training Schemes

Project 4: Impact of Industrialization on Employment in ECAFE Countries

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Project 6: Measurement of the Contribution of Human Resources to Economic Growth

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Project 2: Human Resources Development: Principles and Problems

Project 3: Case Studies of Manpower Planning and Employment in Selected Countries of ECAFE Region:

- Afghanistan
- Burma
- Ceylon
- Republic of China
- India
- Iran
- Japan
- Republic of Korea
- Malaysia
- Nepal
- Pakistan
- Philippines
- Thailand

Project 4: Basic Statistics Relating to Human Resources Development in Asia and the Far East

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Project 7: Mobilization of Human Resources for Economic Development in ECAFE Countries

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Project 18: Industrial and Occupational Distribution of Labour Force in ECAFE Countries

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Project 21: Effects of Technological, Institutional and Structural Changes on Displacement of Labour in Traditional Sectors in the Developing Economies

Project 22: Some Aspects of Wage Policies in the Context of Industrial Relations in Developing Countries

Project 23: Income Distribution, Employment and Economic Growth

Project 24: Case Studies of Manpower Planning and Employment in:

- Mainland China
- Cambodia
- Laos
- Republic of Vietnam
- Western Samoa, and
- Lower Mekong Basin

Project 25: The Impact of Agrarian Reforms on Rural Employment

Project 26: The Impact of Community Development Projects on Rural Employment in ECAFE Countries
RESEARCH PROJECTS COMPLETED

Project 1 - SURVEY OF DOCUMENTARY MATERIAL ON HUMAN RESOURCES DEVELOPMENT WITH SPECIAL REFERENCE TO ASIA AND THE FAR EAST

This survey of documentary material on human resources development was completed during the period April - June 1965. The results of this survey have been incorporated in a mimeographed publication "Documentary Material on Human Resources Development with Reference to Asia and the Far East". The primary objective of this survey was to find out what documentary material was available on human resources development, particularly in the countries of Asia and the Far East. The survey attempts to list all the important documentary materials, whether published or mimeographed, available on the various aspects and problems of human resources development planning, such as the 'concept' of investment in human resources; objectives and strategy of human resources development planning; techniques and methods of manpower assessment; human resources planning in relation to economic and social development; measures for employment promotion and rational utilization of human resources; national planning of vocational and technical training; strategy of educational planning; organization of manpower services; and case studies of human resources development planning in the Asian and other regions in general and in the individual countries of the Asian region in particular. The Asian countries covered by the Survey are: Afghanistan, Burma, Cambodia, Ceylon, Mainland China, Republic of China (Taiwan), India, Indonesia, Iran, Japan, Republic of Korea, Laos, Malaysia, Nepal, Pakistan, Philippines, Thailand and the Republic of Vietnam.

Project 2 - EMPLOYMENT OBJECTIVES AND DISTRIBUTION OF LABOUR FORCE IN ECAFE COUNTRIES

The findings of this study have been incorporated in the mimeographed paper, "Employment Objective and Distribution of Labour Force in ECAFE Countries" (Paper No.CAEP 2/2),
prepared for the Second Session of the Conference of Asian Economic Planners held in Bangkok from 19 - 26 October 1964 under the auspices of the U.N. Economic Commission for Asia and the Far East. The study reviews briefly the employment situation in the ECAFE countries in retrospect and prospect; the impact of development plans on the employment situation; the actual performances of the economies against the planned targets; the major problems and obstacles encountered in the accomplishment of the employment objectives, and the additional measures that appear necessary for rapid expansion of employment opportunities, and for fuller and more efficient utilization of human resources in the ECAFE countries.

**Project 3 - NATIONAL PLANNING OF VOCATIONAL TRAINING**

This study comprises of the following four working papers originally prepared for the Asian Regional Seminar on National Planning of Vocational Training, held in Kuala Lumpur from November 16 to 29, 1964. The Seminar was sponsored by the International Labour Organization.

(i) **Nature of Planning (Paper No. AS/NPVT/1):** The paper deals with the principal choice problems in development planning - choice of objectives; choice of development strategy; choice of time perspective; choice of growth rate; choice of investment pattern and priorities; choice of production techniques, and choice of balanced and unbalanced growth and the problem of the mutual consistency of choices.

(ii) **Vocational Training and Economic Development (Paper No. AS/NPVT/8):** The paper deals with the part played by different types of training - institutional, on-the-job, apprenticeship, upgrading or accelerated training, instructor, supervisor and management training, etc., and the techniques and methods of planning vocational training in developing economies.
(iii) Cost Aspects of Vocational Training
(Paper No. AS/NPVT/12): The paper deals with costs as determinant of choice; problems in the assessment of training costs; major steps in the assessment of training costs; recurring costs and capital costs, and the measures for elimination of wastages in training.

(iv) Sources of Revenue for Training Schemes
(Paper No. AS/NPVT/13): The paper deals with the various aspects of financing vocational training programmes; principal sources of revenue, and the economic, political and social effects of different methods of financing.

Project 4 - IMPACT OF INDUSTRIALIZATION ON EMPLOYMENT IN ECAFE COUNTRIES

The results of this study have been incorporated in a mimeographed document, "Industrialization and Employment with Special Reference to Countries of ECAFE Region", (Paper No. E/CN.11/I&NK/Ind,Conf/C.9), submitted to the Asian Conference on Industrialization held in Manila from 6 - 20 December 1965. An attempt has been made in this paper to analyse and examine briefly the employment situation in ECAFE countries in retrospect and prospect; the employment objectives and the sectoral distribution of employment targets in the national development plans; the actual performances in the industrial sector against the planned targets; the principal problems and obstacles encountered in the realization of the employment targets in the industrial sector; the overall impact of industrialization on the employment situation in the ECAFE countries; and the additional and supplementary measures that appear necessary for optimizing the impact of industrialization on the current and prospective employment situation in the countries of the ECAFE region. The paper also examines the question of the alternative choices of production techniques; criteria for the selection of most suitable production techniques; the applicability of 'cost-benefit' approach and the need for and feasibility of developing a new capital saving industrial technology suitable to the needs and requirements of
developing economies. The paper also examines the possibilities for fuller utilization of existing capacity in manufacturing industries and the feasibility of developing rural industries in the countries of ECAFE region.

Project 5 - AGRICULTURAL MANPOWER PLANNING AS AN INTEGRAL PART OF NATIONAL DEVELOPMENT

The results of this study have been incorporated in a mimeographed paper, "Agricultural Manpower Planning as an Integral Part of National Development, including Methodological Aspects", prepared for the First Regional Seminar on Higher and Intermediate-Level Agricultural Education for Asia and the Far East, organized by FAO with the cooperation of UNESCO and ILO, in Bangkok from 18 - 28 October 1965. This paper was also translated into French under the title, "La Planification de la Main d'Oeuvre en Agriculture, Partie Integrale du Developpement National: Aspects Generaux et Methodologiques", through the very valuable assistance provided by Mr. Jean Fauchon, Chief of the Rural Vocational Training Unit, Human Resources Department, ILO, Geneva. This paper attempts to analyse and examine the broad approach, objectives, and strategy of agricultural manpower planning in developing countries; the major steps involved in agricultural manpower assessment; the sources, scope and coverage of manpower assessment programme; and the merit and shortcomings of the various techniques and methods that could be used for short and long-term assessment of the requirements and availability of high and intermediate-level agricultural personnel. Some of the methods that have been discussed for short and long-term assessment of manpower requirements in agriculture are: Agricultural Manpower Requirements Survey Method; the Extrapolation Method; the International Analogies and Comparisons' Method; the Analytical Method of Factorization and Prof. Tinbergen's Model for Quantitative Adaptation of Agricultural Education to Economic Growth. The conclusions of the paper have been summarized in the last paragraph of the mimeographed paper.
This mimeographed document on "Measurement of the Contribution of Human Resources to Economic Growth", attempts to analyse and examine whether rapid rate of 'human capital formation' is as important a precondition and prerequisite for attainment of accelerated and self-sustained economic growth as rapid rate of 'physical capital formation', the difference between the concept of 'human capital formation' and 'physical capital formation'; the concept of 'investment in human resources'; the 'rate of return' on investments in human resources; the conceptual, methodological, and statistical problems involved in the measurement of the contribution of human resources to economic growth and development; and the extent to which the various difficulties could be overcome. The second part of this mimeographed document examines the various surveys and studies that have recently been undertaken in the U.S.A., the U.S.S.R., Europe, and Japan to find out whether there is any quantitative relationship between investments in human resources and the rate of economic growth; whether it is possible to express this relationship in quantitative terms; what difficulties have been encountered in the measurement of the contribution of human resources to economic growth and how have they been overcome; and to what extent can this relationship provide broad guidelines for the formulation and implementation of development policies and programmes. The principal approaches discussed in this paper are: (i) the Residual Factor Approach; (ii) the Investment-Income Approach; (iii) the Rate of Return Approach; (iv) the Inter-country Comparisons and Analogies Approach; (v) Prof. Tinbergen's Education Model Approach; and (vi) Professors Harbison and Myers' Composite Index and GNP Approach.

This brief paper on "Employment Prospects of Children and Youth in Asia - Conclusions and Recommendations", prepared primarily for the use of the Drafting Committee of the UNICEF Asian Conference on Children and Youth
in National Planning and Development held in Bangkok from 16-24 March 1966, sums up the principal conclusions which emerge from a factual and analytical survey of the employment prospects of children and young people in the selected countries of Asia and outlines the broad design of strategy most appropriate to the developing countries of the Asian region for rapid expansion of employment opportunities and for raising the employability of the young persons through education, vocational and technical training, better preparation for working life, through organization of national employment services, employment counselling and vocational guidance programmes, and through implementation of national schemes of youth mobilization for development works.

Project 8 - OBSTACLES AND TECHNIQUES FOR ACCOMPLISHMENT OF DEVELOPMENT OBJECTIVES

The results of this study have been published in the "Proceedings of the Far East Regional Manpower Assessment and Educational Planning Seminar" sponsored by the U.S. Agency for International Development (U.S. A.I.D.) and the National Economic Council, Republic of Philippines, and held in Manila from 12-17 February, 1965 under the caption "Obstacles and Techniques for Accomplishment of Development Objectives". The study attempts to identify the major obstacles encountered in the accomplishment of the development objectives in the field of human resources planning; the actual performances as against the planned targets; and the administrative and organizational bottlenecks in the development of an integrated human resources and educational planning policy, and in the coordinated implementation of the programmes for the organization, development and efficient utilization of human resources in the developing countries of Asia and the Far East.

Project 9 - TRAINING IN MANPOWER STATISTICS

This document on "Training in Manpower Statistics" (Paper No. ASTAT/RTC/26), was originally prepared for the Regional Statistical Training Center sponsored jointly by ECAFE and the Statistical Office of the United Nations and in cooperation with the BTAO, and
held in Bangkok from July 14 to September 4, 1964. The document deals with the importance and significance of training the statistical personnel in manpower statistics; the concept of 'manpower statistics', the principal sources, scope and coverage of manpower statistics; the role of manpower statistician in the development of a continuing manpower information programme; the organizational aspect of training programmes and the types of training programmes that could be developed at primary, intermediate, and professional levels.

II.
COORDINATION OF RESEARCH AND TEACHING PROGRAMMES

A number of Seminar Papers covering different aspects of human resources development planning, and broadly based on the survey of manpower and employment situation in the countries of ECAFE region, have been prepared in connection with the following regional and country courses organized by the U.N. Asian Institute for Economic Development and Planning during the period January 1964 to October 1966. The research programme at the Asian Institute has been primarily developed to supplement the teaching programme, and is closely geared to meet the immediate and urgent needs of development planning.

(i) Six-month General Course - 1964, 1965, 1966
(iii) Short-Term Country Courses:
   (a) Indonesia - 1964
   (b) Singapore - 1964
   (c) Republic of China - 1965
   (d) Thailand - 1965

(i) SIX-MONTH GENERAL COURSE: The following Seminar Papers have been prepared on the subject of Human Resources Development which forms compulsory part of the six-month General Course at the Institute:

- Human Resources Development Planning (Seminar Paper 1966-F.1)
Objectives and Strategy of Human Resources Development Planning (Seminar Paper 1966-F.2)

- Human Resources Planning Process: Techniques and Methods of Manpower Assessment (Seminar Paper 1966-F.3)

- Human Resources Planning Process II: Manpower Planning in relation to Economic and Social Development. (Seminar Paper 1966-F.4)

- Design of Human Resources Policy I: Measures of Employment Promotion (Seminar Paper 1966-F.5)

- Design of Human Resources Policy II: Measures for Development of Human Resources (Seminar Paper 1966-F.6)

- Case Study of Manpower Planning and Employment in ECAFE Region - Some Statistical Tables (Seminar Paper 1966-F.1-6)

- Documentary Material for Country Studies and Surveys: Afghanistan, Ceylon, Taiwan, India, Iran, Korea, Laos, Nepal, Pakistan, Philippines, Thailand and Vietnam. (Documents 1966-F-D)

(ii) THREE-MONTH ADVANCED COURSE: The subject of Human Resources Development formed compulsory part of the Advanced Course during the year 1964, and one of the four optional elective subjects offered for specialization during the 1965, and proposed for 1966. The subject covers the following aspects of human resources development for intensive study:

- Measurement of the Contribution of Human Resources to Economic Growth: I (Session A.1)
- Measurement of the Contribution of Human Resources to Economic Growth: II (Session A.2)

- Economic and Social Implications of Demographic Growth (Session A.3)

- Labour Force, Employment and Unemployment in ECAFE Countries (Session A.4)

- Techniques and Methods of Long-Term Manpower Forecasting: I (Session A.5)

- Techniques and Methods of Long-Term Manpower Forecasting: II (Session A.6)

- Integration of Human Resources Development Planning with General Economic Development Planning (Session A.7)

- Human Resources Planning Policy for ECAFE Countries (Session A.8)

- Case Studies of Human Resources Development Planning in Selected Countries (Session A.9)

Each fellow attending the Advanced Course on Human Resources Development is required to prepare during the session a detailed case study of manpower planning and human resources problems in his own country.

(iii) SHORT-TERM COUNTRY COURSES:

(a) **INDONESIA**: Short-term Course on Planning Problems and Techniques held in Tjipayung, Indonesia from November 30 to December 18, 1964. It was attended by 40 participants. The experts contribution consisted of 8 seminars on various aspects of human resources development planning and planning organization and administration, with special reference to conditions prevailing in Indonesia. (Seminar Papers Nos. Indonesia H.1-8)
(b) SINGAPORE: Short-Term Training Course on Planning Techniques held in Singapore from December 1, 1964 to January 23, 1965. It was attended by 30 participants from various Ministries and Departments. The principal contribution of the expert consisted of ten seminars on various aspects on Human Resources Planning, Economics of Vocational Training (including cost aspects of vocational training and sources of revenue for vocational training programmes) and Project Appraisal with special reference to conditions prevailing in Singapore. (Seminar Papers Nos. Singapore H.1-10)

(c) REPUBLIC OF CHINA (TAWAIN): Short-Term Training Course on "Planning Techniques and Problems in China (Taiwan)", held in Taipei during November-December, 1965. The principal contribution of the expert consisted of six seminars on various aspects of human resources development viz., objectives and strategy of human resources development planning; techniques and methods of manpower assessment; measures for employment promotion and problems of human resources development with special reference to Taiwan. (Seminar Papers Nos. B.1-5/1965-66/Tai)

(d) THAILAND: Short-Term National Training Course on "Manpower Problems and Development of Human Resources in Thailand", held in Bangkok from December 20, 1965 to January 21, 1966. It was the first specialized and intensive short-term national training course organized by the Institute. It was also the first Institute course designed specifically for Thailand, and oriented primarily to train the human resources and manpower specialists who could assist their respective ministries and departments in the formulation and implementation of manpower policies and programmes. 25 Thai officials drawn from 18 different Ministries and Departments, universities and Banks successfully completed this course. The course was very comprehensive in scope and intensive in treatment. It attempted to cover all important aspects of the problem of human resources development planning in a developing economy, ranging from the measurement of the contribution of human resources to economic growth and methods of assessing current and future
demand for and supply of manpower in the conditions prevailing in Thailand to the planning of education, health, employment and vocational and technical training in Thailand. The Outline of Syllabus of this Course is attached as Annex I. The expert assisted the Director in the organization of the course, and in the conduct of eight seminars on various aspects of human resources development in Thailand. (Seminar Papers Nos. Thai-65/66-A-1,A-4, B-2-3, C-2, D-1-2, E-4)

III.

OTHER PROJECTS OR CONTRIBUTIONS

Based on the survey of existing situation in the ECAFE countries, and on the results of the empirical and diagnostic studies carried out at the ILO Headquarters, the Asian Institute or elsewhere, statements, written or oral, were prepared and presented on behalf of the I.L.O. or the Asian Institute at the following national, regional or international seminars, conferences or expert working group meetings:

- **Asian Conference on Children and Youth in National Planning and Development**, held in Bangkok, 8 - 15 March 1966 on the subject of "Youth and Work" (CRP/10, 11 March, 1966)

- **22nd Session of the Economic Commission for Asia and the Far East**, held in New Delhi, 22 March - 4 April, 1966; statements made on the subjects of Status and Prospects of Children and Youth, Review of Recent Demographic Developments and Statistical Development in the ECAFE region.

- **Colombo Plan Bureau's "National Seminar on Approaches to Cooperation between Industries and Institutes in Technical Training"**, held in Bangkok from October 6 - 8, 1965. The observations and suggestions made by ILO representative at the meeting are contained in the CPB's "Summary Record of Proceedings" (Colombo, October 1965) p. 14-17 and p. 43-48.
- Preparatory Working Group of Experts on Methods of Inducing Social Change for Overall Development held in Bangkok from January 10-14, 1966.


- First Regional Seminar on Higher and Intermediate Level Agricultural Education for Asia and the Far East organized by FAO with cooperation of UNESCO and ILO held in Bangkok from 18 - 28 October, 1965.

- YCW Asian Regional Seminar for the Formation of Leaders of Working Youth in Asia held in Bangkok, November 27, 1965, on the subject of "ILO and Workers' Education".


- UNICEF Seminar on "Employment Prospects and Vocational Training for Youth in Thailand" held in Bangkok on September 15, 1965.


- Far Eastern Regional Seminar on Manpower Assessment and Educational Planning held in Manila from February 12 - 17, 1965.

IV.

RESEARCH PROJECT IN PROGRESS OR PROPOSED

Project 1 - REVISION OF THE "SURVEY OF DOCUMENTARY MATERIAL ON HUMAN RESOURCES DEVELOPMENT WITH SPECIAL REFERENCE TO ASIA AND THE FAR EAST"

The mimeographed publication "Survey of Documentary Material on Human Resources Development with Special Reference to Asia and the Far East", issued by the Asian Institute for Economic Development and Planning, last year is now in course of extensive revision. This bibliography was originally compiled for the use of the participants offering the advanced elective course on Human Resources Development at the Institute, and for those who were interested in the more specialized and intensive study of the problem of human resources development planning particularly in the countries of Asia and the Far East. This publication is presently out of stock, and the large outstanding demand for this publication has necessitated the issue of the revised edition. About a 1,000 more references are proposed to be incorporated in the revised edition. It is hoped that the revision will considerably improve the quality, scope and coverage of the documentary material included in the survey. It is proposed to classify the documentary material included in the survey under the following heads:

I. HUMAN RESOURCES DEVELOPMENT

A. Human Resources as a Factor in Economic Development
B. Economics of Human Resources
C. Concept of Investment in Human Resources
D. Demographic Aspects of Manpower Planning
E. Planning Techniques

II. OBJECTIVES AND STRATEGY OF HUMAN RESOURCES DEVELOPMENT

A. Approach to Human Resources Development Planning
B. Human Resources Diagnosis Function
C. Organization, Development and Utilization of Human Resources

III. HUMAN RESOURCES PLANNING PROCESS: I
A. Techniques and Methods of Manpower Assessment
B. Case Studies
C. Problems of Measurement

IV. HUMAN RESOURCES PLANNING PROCESS: II
Human Resources Planning in Relation to Economic and Social Development

V. DESIGN OF HUMAN RESOURCES POLICY: I
Measures for Employment Promotion

VI. DESIGN OF HUMAN RESOURCES POLICY: II
Measures for Development of Human Resources Through Vocational and Technical Training

VII. DESIGN OF HUMAN RESOURCES POLICY: III
Measures for Rational Utilization of Human Resources

VIII. DESIGN OF HUMAN RESOURCES POLICY: IV
A. Strategies of Educational Planning
B. Case Studies

IX. ORGANIZATION OF MANPOWER SERVICES
A. Employment Services Organization
B. Vocational Training
C. Vocational Guidance, Selection and Recruitment
X. INTERNATIONAL SOURCES OF STATISTICAL DATA

XI. BIBLIOGRAPHIES

XII. COUNTRY STUDIES AND SURVEYS:

ASIA

The Asian Region - General
Afghanistan
Burma
Cambodia
Ceylon
Mainland China
Republic of China (Taiwan)
India
Indonesia
Iran
Japan
Republic of Korea
Laos
Malaysia
Nepal
Pakistan
Philippines
Thailand
Republic of Vietnam

AFRICA

LATIN AMERICA

NORTH AMERICA - U.S.A., Canada and Others
EUROPE

MIDDLE EAST

U.S.S.R.

The developing countries are becoming increasingly conscious of the need for and urgency of developing human resources as an integral part of general economic development planning. There is growing realization
that rapid rate of 'human capital formation' is as important a precondition for attainment of accelerated and self-sustained economic growth as rapid rate of 'physical capital formation'. The developing countries are, therefore, anxious to involve, on the one hand, a balanced, effective and rational approach to the problem of human resources planning, and, on the other, a bold, well-conceived and well-designed strategy for the organization, development and fuller utilization of human resources of the country. The proposed publication, "Human Resources Development: Principles and Problems", will not only assist a systematic and scientific study, analysis and identification of the major manpower problems confronting the developing countries but also in the formulation of appropriate policies and programmes designed to secure fuller development and more efficient utilization of human resources. The contents of the proposed study are as follows:

**CONTENTS**

Chapter I: **Contribution of Human Resources to Economic Growth**

Human resources as a factor in economic development; the concept of human capital; the difference between the concept of 'human capital formation' and 'physical capital formation'; the concept of investment in human resources; returns on investment in human resources; the distinctive characteristics of the rate of return on investment in human resources; the problems of measurement: conceptual, methodological and statistical; some quantitative explorations: recent surveys and studies; some approaches to the problem of measurement: (i) the residual factor approach, (ii) the investment-income approach, (iii) rate of return approach, (iv) Harbison and Myers' "composite index and GNP approach"; some concluding observations.

Chapter II: **Demographic Growth and Economic Development**
A recent trends in fertility and mortality in ECAPF countries; economic and social implications of demographic growth; changes in demographic characteristics; implications of changing age structure; manpower structure and economic development; changing structure of employment; changes in occupational structure and manpower requirements; implications on rate of savings, investments, productivity and levels of living.

Chapter III: Objectives and Strategy of Human Resources Development Planning

Approach to human resources development planning; human resources diagnosis function; assessment of overall shortages and surpluses; structure of manpower shortages; structure of manpower surpluses; nature of manpower imbalances; design of human resources strategy; employment objectives in economic development planning; the genesis of the employment problem; unemployment and under-employment; levels and trends; strategy of employment promotion; setting employment and training targets; general policies of employment promotion; employment promotion in modern sector; employment promotion in traditional sector; development of vocational training, national employment services and vocational guidance programmes; mobilization of human resources for national development.

Chapter IV: Human Resources Planning Process – I: Techniques and Methods of Manpower Assessment

Methods of assessing the current manpower situation:

Assessing the size and composition of current labour force; assessing the size and composition of current employment; assessing the current manpower surpluses; assessing the current manpower shortages; assessing the types of manpower surpluses and shortages.
Methods of assessing the future manpower situation:

Approach to long-term manpower forecasting; assessing the overall labour force and manpower requirements; assessing the future labour force and manpower requirements by broad geographical areas; assessing the future labour force and manpower requirements by broad occupational categories; assessing future vocational training requirements; assessing the future educational requirements; some concluding observations.

Chapter V: Human Resources Planning in Relation to Economic and Social Development

Strategy of employment promotion; employment problems of developing economies; mechanism of employment target-setting; size of employment targets; sectoral distribution of employment targets; employment policy in developing economy; levels and patterns of investment; production techniques and employment creation; need for a new capital saving industrial technology; some concluding observations.

Chapter VI: Design of Human Resources Policy - I: Measures for Employment Promotion

Employment promotion in modern sector:

Fuller utilization of existing industrial capacity; development of modern industry; assistance to small-scale industry; technological research; large-scale capital construction projects.

Employment promotion in traditional sector

Institutional Measures:

Agrarian reform; community development.
Technical measures:

Land development and land settlement; organization of local capital construction projects; introduction of more labour intensive and more diversified farming; development of other activities closely allied to agriculture; development of viable rural industries; extension of social services to rural areas; promotion of social services on a self-help basis; special work programmes; youth mobilization schemes.

Chapter VII: Design of Human Resources Policy - II: National Planning of Vocational Training

Need for careful planning; integrating training programmes with needs of development planning; assessment of future vocational training requirements; determination of priorities; training of employed manpower; coordination of training programmes; inter-relationship between various types of training programmes collaboration between industry and training institutes; qualitative aspects of training programmes; wastages in technical education and training; broadening the scope of training programmes.

Chapter VIII: Role of Different Types of Training in Economic Development

Economics of vocational training:

The viability of an industry: (a) determinants of productivity, (b) productivity and technology, (c) efficiency of resource utilization; the viability of the economy; considerations in the selection of vocational training programmes: flexibility, adaptability, effectiveness, economy, accessibility.
Role of different types of training in economic development:

Institutional training at (a) professional level, (b) technical level, and (c) craftsmen level; apprenticeship training; on-the-job or in-service training; up-grading training; accelerated training; training in traditional sectors; sandwich training; induction training; training of instructors; supervisors' training; management development and training programmes; re-orientation training.

Chapter IX: Cost Aspects of Training Programmes

Choice of training schemes; concept of training costs; assessment of training costs; major steps in the assessment of training costs; methods of forecasting training costs; estimating recurring costs; estimating capital costs; elimination of waste in training.

Chapter X: Sources of Revenue for Training Programmes

Financing of vocational training:

Broad considerations in the financing of vocational training; administrative responsibility for financing; constitutional texts and laws; financing at higher technical or university level; distribution of financial responsibility.

Sources of revenue:

Tax-general or special: direct taxes (a) taxation of income and wealth, (b) expenditure tax, (c) taxation of agriculture, (d) betterment levies; indirect taxes (a) taxes on foreign trade, (b) internal taxation of commodities and services; loans and borrowings: domestic or foreign;
enrolment, examination and certification fees; specific taxes on enterprises; subsidies by government to enterprises; participation by undertakings: compulsory or voluntary; public participation; sale of products produced; special measures; foreign contributions.

Chapter XI: Organization of Manpower Services

Organization of national employment service; organization of vocational and technical training programmes; institution of vocational guidance and employment counselling schemes; standardization of selection and recruitment procedures; vocational rehabilitation; development of employment market information programmes; development of national occupational classification system; organization of manpower planning and development services at various levels.

Chapter XII: Manpower Mobilization for Economic Development

Special manpower mobilization schemes and youth programmes for development purposes:

Objectives and goals; forms and methods of organization; basic considerations in the formulation of youth mobilization programmes; major steps in the formulation of the project; financing of the project; location of the project; machinery for implementation; selection, recruitment and training of personnel; type of work programmes; evaluation of work performances and impact on employment; case studies of the experiences of selected developing countries in the organization of pilot projects.
Chapter XIII: Integration of Manpower Planning with General Economic Development Planning

Nature of planning process; steps involved in the preparation of an economic plan; type of data needed for integrating manpower planning with general economic development planning at various stages; determination of provisional global targets; determination of provisional sectoral targets; selection of projects; development of sectoral plans and revision and finalization of the overall plan; administrative and organizational machinery for the coordination of manpower plans with general economic development plans at various levels; problems encountered in securing adequate integration of manpower planning with economic development planning; some concluding observations.

Project 3 - CASE STUDIES OF MANPOWER PLANNING AND EMPLOYMENT IN SELECTED COUNTRIES OF ECAFE REGION

The principal objective of this project is to study, analyse and identify the major manpower and employment problems confronting the countries of the ECAFE region, and in the light of the conclusions drawn and facts established, to develop a broad design of strategy and suggest specific measures that might appear feasible for the more rapid development, better organization and more efficient utilization of the available manpower resources of the ECAFE countries. The countries selected for intensive study of the manpower and employment problems are: Afghanistan, Burma, Ceylon, Republic of China (Taiwan), India, Iran, Japan, Republic of Korea, Malaysia, Nepal, Pakistan, Philippines, Thailand.

Subject to the availability of data, it is proposed to follow a uniform pattern in the analysis and presentation of the case studies on manpower and employment problems in the selected countries of ECAFE region. The broad pattern proposed for these case studies, is as follows:
PART I: INTRODUCTION

PART II: CURRENT MANPOWER SITUATION

Population: Size and Growth
Age Structure
Labour Force: Size and Growth
Labour Force Structure
Occupational Structure
Professional and Technical Workers
Demographic and Economic Characteristics

CURRENT EMPLOYMENT SITUATION

The Employed
  Modern sector
  Traditional sector
The Unemployed
  Pattern of unemployment
  The educated unemployed
  The Under-employed

CURRENT MANPOWER REQUIREMENTS

Current Unfilled Vacancies
Inadequately filled jobs
Conditional Manpower Requirements
Replacement by Foreign Technicians

CURRENT MANPOWER SHORTAGES AND SURPLUSES

PART III: FUTURE MANPOWER SITUATION

Short-Term Assessment: Plan Period
  Over-all assessment
  Assessment of occupational categories

Long-Term Manpower Forecasting
  Forecasting future population
  Population of working age
  Future labour force participation rates
  Future labour force: size and growth
  Employment prospects
    Modern sector
    Traditional sector
Future requirements of specialized manpower
Anticipated out-turn from vocational institutions
Anticipated surpluses and shortages

PART IV: ECONOMIC AND SOCIAL IMPLICATIONS

Labour Force: Size and Growth

PART V: POLICY MEASURES

Employment Objectives in Economic Development
Setting Employment and Training Targets
Employment Promotion
Employment Promotion in Modern Sector
Fuller utilization of existing industrial capacity
Development of modern industry
Assistance to small-scale industry
Technological research
Large-scale capital construction projects

Employment Promotion in Traditional Sector
Institutional measures
Agrarian reform
Community development programmes
Technical measures
Land development and land settlement
Organization of local capital construction project

Introduction of more labour-intensive and more diversified farming
Development of other activities closely allied to agriculture
Development of viable rural industries

Extension of Social Services to rural areas
Promotion of social services on self-help bases
Special work programmes

DEVELOPMENT OF VOCATIONAL TRAINING

Need for Careful Planning
Assessment of Vocational Training Requirements
Institutional Training
Apprenticeship Training
Up-Grading Training
Accelerated Training
Training in Traditional Sector
Superviser Training
Management Development

FORECASTING THE FUTURE EDUCATIONAL REQUIREMENTS

Manpower Requirements by Educational Category
Future Educational Requirements
   Primary education
   Secondary education
   Higher education
   General education
Priorities in Educational Planning

EXTENSION OF MANPOWER SERVICES

Extension of Employment Service
Vocational Guidance and Employment Counselling

MIGRATION

CONCLUSION.

Project 4 - BASIC STATISTICS RELATING TO HUMAN RESOURCES DEVELOPMENT IN ASIA AND THE FAR EAST

The principal objective of this project is to pool together all the available statistics relating to human resources development in the countries of Asia and the Far East. Such statistics are urgently needed for a systematic and scientific study of the changing manpower and employment situation in each country; changes in the size, composition and distribution of labour force; the economic and social implications of demographic growth; the levels and trends of employment, unemployment and under-employment in Asian countries; the impact of development planning on employment; the size and structure of manpower surpluses and shortages; the actual
performances in the field of employment and training as against the plan targets; the inter-regional and inter-country differences in the levels of human resources development.

The following tables have already been compiled:

**POPULATION: SIZE, GROWTH & DISTRIBUTION**

- Table 1 - Population of Asian Countries: Estimates for 1960, and projections for 1970 & 1980
- Table 2 - Annual Rate of Population Growth by Region 1920-60
- Table 3 - Population by Broad Age-groups in Asian Countries: Estimates for 1960, and Projections for 1970 & 1980
- Table 4 - Population by Sex in Asian Countries: Numbers of Males per 1,000 Females

**ECONOMICALLY ACTIVE POPULATION**

- Table 5 - Economically Active Population in Countries of the Asian Region
- Table 6 - Sectoral Distribution of Economically Active Population in Selected Countries of the Asian Region
- Table 7 - Projected Economically Active Population in Selected Countries of the Asian Region
- Table 8 - Distribution of Economically Active Population by Industry in the Asian Region
- Table 9 - Distribution of Economically Active Population by Broad Occupational Categories in Asian Countries

**FERTILITY, MORTALITY & LIFE EXPECTANCY**

- Table 10 - Levels of Fertility in Selected Countries of the Asian Region
- Table 11 - Levels of Mortality in Selected Countries of the Asian Region
- Table 12 - Trends of Mortality in Selected Countries of the Asian Region
- Table 13 - Expectation of Life in Selected Countries of the Asian Region
DEMOGRAPHIC IMPLICATIONS

Table 14 - Estimated Population Density in Selected Countries of Asian Region
Table 15 - Population Pressure on Cultivable Land in Selected Countries of Asian Region
Table 16 - Average Rate of Growth of Gross National Product in Selected Countries of Asian Region
Table 17 - Average Annual Rate of Increase in Agriculture and non-Agriculture Incomes and Labour Force in Selected Countries of Asian Region
Table 18 - Sectoral Contribution to National Product in Selected Asian Countries: Changes in Relative Shares 1950-62
Table 19 - Number of persons in Dependent Age Groups per 100 Persons of Working Age
Table 20 - Annual Rates of Population Growth in Selected Cities and Countries of Asian Region
Table 21 - Historical Trends in the Distribution by Type of Economic Activity in Some Countries

EDUCATION

Table 22 - Indicators of Development: first-level Education in Asia
Table 23 - Indicators of Development: Second-level Education in Asia
Table 24 - Indicators of Development: Third-level Education in Asia
Table 25 - Percentage Distribution of Students in Asia by Branches of Study around 1960
Table 26 - Educational Attainment of the Population in Asia
Table 27 - Relationship between Percentage of GNP spent on Public Education and GNP per capita in Asian Countries
Table 28 - Pupil-Teacher Ratios at the First and Second Levels of Education in Asia around 1960
LABOUR FORCE PROJECTIONS 1960-80

Table 29 - Labour Force Projections for India 1960-80
Table 30 - Labour Force Projections for Pakistan 1960-80
Table 31 - Labour Force Projections for Cambodia 1960-80
Table 32 - Labour Force Projections for Malaysia 1960-80
Table 33 - Labour Force Projections for Indonesia 1960-80
Table 34 - Labour Force Projections for Korea 1960-80

MANPOWER

Table 35 - Stock of High-Level Manpower in Asian Countries, around 1960.

COUNTRY TABLE: THAILAND

Table 36 - Alternative Population Projections for Thailand 1960-2000
Table 37 - Birth Rates, Death Rates and Rates of Population Growth in Thailand 1960-80
Table 38 - Labour Force Projections in Thailand, 1966-86
Table 39 - Employment by Major Industry in Thailand 1956 & 1960
Table 40 - Employment by Major Occupations in Thailand 1960
Table 41 - Projection of Thailand's Labour Force by Economic Sectors: 1986
Table 42 - Demographic Outlook in Thailand in Relation to some other Countries

The other tables are still under compilation.

Project 5 - INTER-RELATIONSHIP BETWEEN HUMAN RESOURCES DEVELOPMENT AND ECONOMIC GROWTH

The principal objective of this project is to find out whether and to what extent are the two variables, viz., human resources development and the rate of economic growth, inter-related; whether it is possible
to express this relationship in quantitative terms; what are the major conceptual, methodological and statistical difficulties in the measurement of such relationship and the extent to which they could be overcome; whether the recent exploratory and empirical studies and investigations undertaken in some of the advanced countries like U.S.A., U.S.S.R., or Japan do provide some conclusive or corroborative evidence of the existence of such relationship between investments in human resources and the rate of economic growth, and finally, to what extent can this relationship provide some broad guidelines or rational basis for formulation and implementation of human resources development policies, and in the integration of such policies with the overall strategy of development planning.

Project 6 - TECHNIQUES AND METHODS OF LONG-TERM PROJECTION OF DEMAND FOR AND SUPPLY OF HIGH-LEVEL MANPOWER IN ECAFE COUNTRIES

It is proposed to analyse and examine in detail the different micro- and macro-methods of projecting the demand for and supply of high-level manpower that could be applied in ECAFE countries considering the availability of data, the existence or lack of a perspective development plan, the stages of economic growth and the nature and magnitude of current imbalances in demand for and supply of high-level manpower. It is proposed to discuss the relative advantages, drawbacks and applicability of each of the following methods of projection: manpower resources and requirements survey method; extrapolation method; international analogies and comparisons method; analytical method of factorization; linear programming method; methods of economic and educational model-building, particularly the UNESCO's 'Asian Educational Model', Prof. Tinbergen's 'Planning Model for Educational Growth' and Prof. Harbison and Myers' 'Composite Index of Human Resources Development', etc.

Project 7 - MOBILIZATION OF HUMAN RESOURCES FOR ECONOMIC DEVELOPMENT IN ECAFE COUNTRIES

The basic objective of this study is to explore the possibilities and prospects of instituting special
manpower mobilization schemes and youth programmes, primarily designed to provide gainful employment and training opportunities to unemployed youth in ECAFE countries. An attempt would be made in this study to examine objectively the economic basis and social justification for launching such programmes; the different forms such programmes have assumed in different countries; the methods of organization; the success achieved and difficulties encountered; the impact such programmes have made on the employment situation in the areas selected; an appraisal of the major type of projects that could be undertaken; the system of financing them; selection, recruitment and training of project personnel; mode of payment to workers; evaluation of work performances; methods of securing local participation in the selection and implementation of work projects; functional distribution of responsibilities between different development agencies; the problems of overall coordination and supervision of work, responsibilities and other technical and administrative matters connected with the formulation and implementation of work projects. An attempt would also be made to examine the feasibility of implementing specific schemes for the mobilization and organization of young persons along the lines of Young Workers' Brigades, Young Workers' Task Force, Civil Conservation Corps, Land Reclamation Brigades and the like to divert and canalize their great creative potentialities, imagination and resourcefulness towards the building up of community assets, and towards their active participation in the mighty task of national-building.

Project 8 - *ECONOMIC AND SOCIAL IMPLICATIONS OF DEMOGRAPHIC GROWTH IN ECAFE COUNTRIES*

The object of this study is to give a systematic appraisal of the magnitude of the problem posed by rapid demographic growth, and its wider implications from the standpoint of the current and future employment situation; formation of domestic capital and raising of productivity, incomes and levels of living of the people. An attempt would also be made to study in detail the implications of rapid demographic growth from the standpoint of population - land-resource balance; the changing age-structure of the population; the industrial and occupational distribution of the labour force; the additional requirements of food, housing, educational facilities and other social and public health services.
Project 9 - LABOUR FORCE, EMPLOYMENT, UNEMPLOYMENT AND UNDER-EMPLOYMENT IN ECAFE COUNTRIES: LEVELS AND TRENDS

The object of this study is to examine the recent trends in the size, composition and distribution of labour force in the ECAFE countries; the levels and trends of employment, unemployment and under-employment in the modern and traditional sectors of the economy; the size, composition and distribution of the unemployed and the under-employed; and the major employment problems confronting the countries of ECAFE region.

Project 10 - ADMINISTRATIVE MACHINERY FOR HUMAN RESOURCES DEVELOPMENT PLANNING IN ECAFE COUNTRIES

This study will consider the problem of setting up a permanent organization at national-level responsible for the organization, development and supervision of a comprehensive human resources development plan; the general organizational set-up of the human resources department, and its functional and technical relationship with the National Economic and Social Development Board and its Secretariat; the principal functions of the human resources department; and some case studies of the working of human resources planning organization in selected countries of the ECAFE region.

Project 11 - PROSPECTS AND IMPLICATIONS OF FULL EMPLOYMENT POLICY IN LABOUR SURPLUS ECONOMIES

The object of this study is to examine the possibilities and prospects of adopting the goal of full, productive and freely chosen employment in economies with surplus labour, and the broader implications of such policies from the standpoint of current and future rate of economic growth and raising of productivity, income and levels of living.
Project 12 - STRATEGY OF RURAL EMPLOYMENT PROMOTION IN ECAFE COUNTRIES

Since most of the increases in the labour force in ECAFE countries are likely to take place in the rural areas, a large part of the remedy for rural unemployment and under-employment will have to be sought in the rural sector itself. It is proposed to undertake an intensive study and examination of the various measures that could be adopted in the rural areas for rapid expansion and promotion of employment opportunities and for fuller and more efficient utilization of the surplus manpower resources, and the type of employment strategy most appropriate for the developing countries of ECAFE region.

Tentative List of Other Projects

Project 13 - EVALUATION OF RURAL WORKS PROGRAMMES AND OTHER PILOT PROJECTS FOR "UTILIZATION OF SURPLUS MANPOWER IN RURAL AREAS"

Project 14 - EMPLOYMENT AND ECONOMIC GROWTH IN ECAFE COUNTRIES

Project 15 - MECHANISM OF AGGREGATE AND SECTORAL EMPLOYMENT TARGET-SETTING IN ASIAN DEVELOPMENT PLANS

Project 16 - USES AND LIMITATIONS OF "TECHNICAL CO-EFFICIENTS" IN PROJECTING THE DEMAND FOR AND SUPPLY OF MANPOWER

Project 17 - LONG-TERM PLANNING OF VOCATIONAL EDUCATION AND TRAINING WITHIN THE OVERALL FRAMEWORK OF DEVELOPMENT PLAN

Project 18 - INDUSTRIAL AND OCCUPATIONAL DISTRIBUTION OF LABOUR FORCE IN ECAFE COUNTRIES

Project 19 - SURVEY OF UNEMPLOYMENT AMONG UNIVERSITY GRADUATES IN SELECTED COUNTRIES OF THE ECAFE REGION
Project 20 - **SURVEY OF UNEMPLOYMENT AMONG HIGH-SCHOOL LEAVERS IN SELECTED COUNTRIES OF THE ECAFE REGION**

Project 21 - **EFFECTS OF TECHNOLOGICAL, INSTITUTIONAL AND STRUCTURAL CHANGES ON DISPLACEMENT OF LABOUR IN TRADITIONAL SECTORS IN THE DEVELOPING ECONOMIES**

Project 22 - **SOME ASPECTS OF WAGE POLICIES IN THE CONTEXT OF INDUSTRIAL RELATIONS IN DEVELOPING COUNTRIES**

Project 23 - **INCOME DISTRIBUTION, EMPLOYMENT AND ECONOMIC GROWTH**

Project 24 - **CASE STUDIES OF MANPOWER PLANNING AND EMPLOYMENT IN:**

- Mainland China
- Cambodia
- Laos
- Republic of Vietnam
- Western Samoa, and
- Lower Mekong Basin

Project 25 - **THE IMPACT OF AGRARIAN REFORMS ON RURAL EMPLOYMENT**

Project 26 - **THE IMPACT OF COMMUNITY DEVELOPMENT PROJECTS ON RURAL EMPLOYMENT IN ECAFE COUNTRIES**
ANNEX I

ASIAN INSTITUTE FOR ECONOMIC DEVELOPMENT AND PLANNING

Short Course on Manpower Problems and Development of Human Resources in Thailand

December 1965-January 1966

(Outline of Syllabus)

Note: A session includes lectures, discussion and exercises spread over one day.

A. INTRODUCTION (3 sessions)
   Significance of human resources as a factor in economic development. Economic and social implications of demographic growth. Relation between manpower structure and economic development. Objectives and strategy of manpower planning with special reference to Thailand.

B. MANPOWER PLANNING TECHNIQUES (3 sessions)

C. MANPOWER PLANNING IN RELATION TO ECONOMIC AND SOCIAL DEVELOPMENT (5 sessions)
D. DEVELOPMENT OF MANPOWER PROGRAMMES (5 sessions)


E. MANPOWER ORGANIZATION AND SERVICES (4 sessions)

Organization set-up for manpower planning at central and regional levels. Organization of national employment services. Vocational guidance and employment counselling. Co-ordination of vocational and technical training to future needs of development planning.